

ance. Vessels near by apparently encountered moderate weather only. However Capt. C. V. Nissen of the American steamship *Mexoil*, from New Orleans to Tampico, forwarded a special report in which he states that on June 27, 9 p. m., in 25° 18' N., 93° 46' W. he encountered this storm, and estimated the strength of wind in squalls at 80 miles an hour. The lowest barometer was 29.56 (uncorrected) at 2 a. m. on the 28th, wind SE., 8 to 10, heavy rain squalls, wind of hurricane force. End of gale, 8 a. m. on the 28th, wind S., 6. Sea moderating.

On the 26th a moderate depression was over the middle section of the steamer lanes; this moved rapidly eastward, and on the 27th was central near 46° N., 25° W. On the 27th there was also a depression over Newfoundland and moderate southerly gales prevailed between the Bermudas and fortieth parallel.

For the remainder of the month moderate weather was the rule over the ocean as a whole, although a few vessels in widely scattered localities reported winds of force 7 and 8.

## OCEAN GALES AND STORMS, JUNE, 1929

Vessel	Voyage		Position at time of lowest barometer		Gale began	Time of lowest barometer	Gale ended	Lowest barometer	Direction of wind when gale began	Direction and force of wind at time of lowest barometer	Direction of wind when gale ended	Highest force of wind and direction	Shifts of wind near time of lowest barometer
	From—	To—	Latitude	Longitude									
NORTH ATLANTIC OCEAN													
Saguache, Am. S. S.	New York	Copenhagen	53 06 N	31 11 W	May 31	June 1	June 1	Inches 28.87	ENE	ENE, 7	ESE	9	ENE-E.
Examelia, Am. S. S.	Mediterranean	New York	39 27 N	25 52 W	31	—, 1	2	30.00	SSW	SSW, 8	W	SSW, 8	
Cornelia, Am. S. S.	New York	Porto Rico	32 20 N	70 40 W	June 10	8 a, 10	10	29.66	S	S, 8	SSW	S, 8	S-SSW.
New York City, Br. S. S.	Fowey, England	Portland, Me.	51 20 N	31 15 W	9	8 a, 10	12	29.39	SSW	WSW, 7	NNW	—, 9	S-SW.
Exhibitor, Am. S. S.	Marseille	Boston	41 35 N	51 20 W	12	Noon, 12	12	29.78	SW	WSW, 7	WNW	WNW, 8	WSW-W.
Coshoma County, Am. S. S.	Rotterdam	New York	48 48 N	17 15 W	11	Noon, 12	14	29.82	SW	SW, 8	SW	WSW, 9	W-SW.
München, Ger. S. S.	New York	Southampton	48 56 N	18 33 W	11	—, 13	14	29.65	WSW	W, 10	W	W, 10	W-NNW.
Middleham Castle, Br. S. S.	Gaeston	Havre	41 01 N	36 30 W	12	4 a, 15	17	29.96	SW	NNE, 6	NNE	NE, 8	
Trinidadian, Am. S. S.	Tampa	Port Arthur	28 16 N	88 03 W	24	11 p., 24	25	29.92	S	S, 7	S	S, 9	Steady.
Bird City, Am. S. S.	New York	Copenhagen	46 16 N	41 23 W	25	4 p., 25	27	29.66	W	W, 6	NNW	NNW, 8	NNW-E.
Wm. G. Warden, Am. S. S.	Montreal	Christi	38 51 N	62 18 W	26	Noon, 26	27	30.01	SW	SW, 8	SW	SW, 8	Steady.
Gulfoil, Am. S. S.	Port Arthur	Philadelphia	29 24 N	93 28 W	28	8 p., 28	28	29.93	SE	SE	SE	SE, 8	Do.
NORTH PACIFIC OCEAN													
Corinto, Am. S. S.	San Francisco	Cristobal	16 22 N	99 46 W	1	1 p., 1	1	29.52	NW	W, 9	SW	WSW, 10	NW-W-SW.
Mojave, Am. S. S.	San Pedro	Nagasaki	30 58 N	141 02 E	1	4 p., 1	1	29.45	S	SSW, 11	SW	SSW, 11	SSE-SW.
Havana Maru, Jap. S. S.	do	Yokohama	33 30 N	142 00 E	1	8 p., 1	2	29.41	E	NE, 8	SE	NNW, 10	ENE-NE-N.
Wisconsin, Am. S. S.	Hong Kong	San Francisco	30 30 N	132 50 E	3	1 p., 5	5	29.51	SSE	SSE, 7	SSW	SSW, 9	SSE-SSW.
Ayaha Maru, Jap. S. S.	Yokohama	Victoria	39 28 N	148 00 E	6	10 p., 6	7	29.10	E	ENE, 8	NNW	ENE, 8	6 points.
Golden Star, Am. S. S.	Otaru	San Francisco	49 26 N	178 36 W	5	12 mid	6	29.20	WSW	NW, 7	SSW	SW, 9	
Do	do	do	48 47 N	159 54 W	7	1 a, 8	9	29.27	E	SW, 7	SE	SW, 9	
Clydefield, Br. M. S.	San Pedro	North China	35 15 N	159 45 E	7	4 a, 8	9	29.82	SSW	W, 8	NW	S, 8	SW-W-NW.
Manoa, Am. S. S.	San Francisco	Honolulu	37 34 N	123 18 W	12	4 p., 12	12	30.02	N	N, 8	NNW	N, 8	N-NNW.
Silverguava, Br. M. S.	do	Yokohama	41 30 N	132 20 W	15	10 a, 15	16	29.67	SSW	SSW, 6	W	W, 8	
Victorious, Am. S. S.	Honolulu	Colon	14 08 N	103 20 W	16	4 p., 16	17	29.66	NNE	E, 9	SSE	E, 10	Steady.
City of Victoria, Can. S. S.	Tsugaru Sts.	San Francisco	42 22 N	153 00 E	19	2 p., 19	19	29.02	SE	SSE, 7	W	SSE, 8	SE-S-WSW.
Boren, Swed. S. S.	Manila	do	44 21 N	140 44 E	21	Noon, 22	22	29.92	ESE	SSE, 8	S	SE, 9	ESE-S.
Grays Harbor, Am. S. S.	Puget Sound	Yokohama	42 15 N	149 30 E	16	10 p., 16	17	29.17	ESE	SSW, 8	SW	SE, 9	S-SSW-SW.
SOUTH PACIFIC OCEAN													
Maunganui, Br. S. S.	New Zealand	Sydney, N. S. W.	36 02 S	154 30 E	9	4 p., 9	10	29.46	W	SSW, 8	SSW	SW, 9	S-SSW-SW.
SOUTH ATLANTIC OCEAN													
Nevada, Dan. S. S.	Rotterdam	Buenos Aires	34 30 S	53 12 W	11	8 p., 11	12	29.60	E	SSE, 9	SSW	SW, 10	E-SSE-SW.
Vandyck, Br. S. S.	New York	Montevideo	28 41 S	47 21 W	12	8 p., 12	13	29.93	SW	SW, 8	SSW	W, 9	

551.506 (265.2)

## NORTH PACIFIC OCEAN

By WILLIS E. HURD

The conditions of atmospheric pressure in June had changed but little from those prevailing in May, except that as a rule the average barometric readings were somewhat lower over the eastern part of the ocean, St. Paul, in the Bering Sea, being the only station, among those given in Table 1, with pressure higher than in the preceding month. The Aleutian cyclone was well developed for the season; it was centered in its fluctuations principally near or south of Dutch Harbor, though on several days it lay over the Gulf of Alaska. On a few days of the month, during incursions southward from the gulf, it affected the weather along the Washington, Oregon, and upper California coasts, causing a few moderate to fresh gales in the vicinity.

Owing to the persistence of the Pacific-California HIGH, fine anticyclonic weather prevailed along the greater part of the steamer routes between the United States and the Hawaiian Islands, except east of the one hundred and thirty-fifth meridian, where fog was frequent.

Barometric data for several island and mainland coast stations in west longitudes are given in the following table:

TABLE 1.—Averages, departures, and extremes of atmospheric pressure at sea level at indicated hours, North Pacific Ocean and adjacent waters, June, 1929

Stations	Average pressure	Departure from normal	Highest	Date	Lowest	Date
	Inches	Inch	Inches		Inches	
Point Barrow <sup>1</sup>	29.65	—0.34	29.96	20th	29.06	9th.
Dutch Harbor <sup>2,3</sup>	29.81	—0.08	30.18	29th	29.34	9th.
St. Paul <sup>2</sup>	29.81	—0.13	30.46	2d	29.32	12th.
Kodiak <sup>2</sup>	30.13	+0.06	30.32	29th	29.86	2d.
Midway Island <sup>2,4</sup>	30.04	0.00	30.14	10th	29.90	21st.
Honolulu <sup>2</sup>	29.90	—0.11	30.35	22d	29.32	15th.
Juneau <sup>2</sup>	30.09	—0.05	30.49	19th	29.38	15th.
Tatoosh Island <sup>2,6</sup>	29.95	—0.01	30.22	18th	29.70	23d.
San Francisco <sup>2,6</sup>	29.91	+0.03	30.08	9th	29.75	27th.
San Diego <sup>2,6</sup>						

<sup>1</sup> Data insufficient to use.<sup>2</sup> P. m. observations only.<sup>3</sup> For 23 days.<sup>4</sup> For 25 days.<sup>5</sup> A. m. and p. m. observations.<sup>6</sup> Corrected to 24-hour mean.